

One Minute Saved My Life

By LCdr. Dave Vodicka

As a squadron safety officer, it is my responsibility to be the CO's conscience on safety matters, promote safety programs, provide training, and get the masses excited about safety as a way of life.

At Aviation Safety Officer School in Pensacola, ORM (operational risk management, as if I need to spell out the acronym because we've heard it so many times), is crammed down our throats ad nauseam. As a result, ASO graduates are ORM instructors by trade. I knew I would have a tough job teaching ORM because, when someone starts talking about it, most people tend to turn off like a switch. I wanted to make ORM easy to understand, so I kept coming back to a personal experience I had several years ago. Let me relate a story and the reason I am alive today.

In 1998, I was halfway through my first tour as an SH-60B pilot with HSL-37, and I had been a helicopter-aircraft commander (HAC) for about a year. I remember my skipper had asked me during my HAC board to list the five ORM steps. Back then, ORM felt like it wasn't much more than a harassment question on a test.

One night on my second deployment, my crew was scheduled for a typical SSC mission in the North Arabian Gulf (NAG) with USS *Crommelin* (FFG-37). The summer was hot and miserable, even in the evening after the sun had gone down. We briefed, completed

the preflight inspection and manned up—nothing out of the ordinary. My 2P was a lieutenant (junior grade) on his first cruise, and my crewman was a young, well-respected AW2 that I had flown with many times before, including our previous deployment a year earlier.

We started engines and engaged the rotor system. The only noteworthy comment about the event thus far was that it was a moonless night (go figure), and the flight deck was exceptionally dark. A newly trained chock-and-chain crew was assigned for flight quarters. We finished the checklists and signaled for chocks and chains to be removed. We saw the two personnel enter the rotor arc. As we watched and waited for the chains to be removed, the three of us in the helicopter commented about how long it was taking for the main-mount-wheel chains to be removed. But, because the personnel were new, and it was very dark, they must have been having difficulties removing the chains. After several more minutes, they finished the job, exited the rotor arc, held up the chains, and dropped the chocks so we could see they had removed everything. I made a mental note all four chains were accounted for and that the helicopter was clear.

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Photo by JO1 Joe Gawlowicz. Modified.

We were ready to launch. A quick scan of the instruments indicated everything was normal. My crewman then said he felt a little uneasy about how long it had taken to remove the chains and said he wanted to step outside to do a quick visual sweep of the helicopter to make sure everything was clear—good on him. I supported his suggestion. There was no rush, and we called paddles to let him know it would be just another minute or so before we were ready to lift. This minute ultimately saved our lives.

We later learned the aircraft maintainer on our det, who performed the task, had serious personal issues.

By now, you might be thinking you've got it figured out: The crewman found a chain still attached, and we prevented the catastrophe of trying to take off while still tethered to the deck of the ship—wrong. By taking a few seconds to look at the situation, unstrap, unplug his ICS cord, open the cabin door, and get one last look at the helicopter, he unknowingly performed an ORM process. From the right seat, my 2P watched him check the right mainmount and right side of the helicopter. Then, from the left seat, I watched him as he walked around the front and to the left with his flashlight. He checked the left mainmount, took a few more steps aft, paused, then scurried around the front again, came through the cabin door, quickly hooked up to the ICS, and called for an immediate shutdown. Just as he did this, I saw the main transmission-pressure-tape gauge drop from green (normal) to yellow (caution) to red (critical). We grabbed the PCLs, shut down the engines, and stopped the rotor blades with the rotor brake. The aircraft obviously was down—end of night. I didn't think much more about what had happened until much later.


What my crewman had seen was transmission oil pouring down the left side of the aircraft. The chock and chain personnel did not notice it because it was dark, and they were new. They probably didn't have enough situational awareness (SA) to look beyond the chains. We also learned maintenance had been performed on the rotor head that day, requiring a disconnect and a reconnect of a transmission line. In reconnecting the line, the

maintenance person only had hand-tightened it. To make matters worse, QA missed the fact the line was not tightened per the maintenance-instruction manual (MIM). We later learned the aircraft maintainer on our det, who performed the task, had serious personal issues.

I can't help but think what could have happened if my crewman had not taken that one extra minute to voice his concern and take one last look. We would have been cleared to lift, pulled into a hover, backed away from the flight deck, made the pedal turn, and climbed into the darkness. I surmise that passing through 500 feet AGL, we would have seen the indications on the gauges for a failing transmission from lack of oil. There would have been nothing we could do but pray it didn't seize before we could land on the boat. Considering we had a moonless night, we were operating from the boat in the NAG, with no divers, and we had a failing main transmission. I doubt we would have survived the fall and subsequent crash into the ocean.

Whether we realize it or not, 90 percent of ORM is on-the-run or time-critical; we do it without thinking about it. It's about asking yourself, "What can hurt me?" and "What can I do to prevent it?" The process is that simple, and that is the message I want to get to the deckplates. Can you see the connection to my story? My crewman saw the chock and chain crew having difficulties and felt uncomfortable about it (What can hurt me? *Identify and Assess the Hazards*). Then he voiced his opinion, unstrapped, unhooked, and performed one last walk-around (What can I do to prevent it? *Make Risk Decisions and Implement Controls*).

Last, he called for an immediate shutdown (*Supervise*). It is ironic that he didn't find what we all had expected him to find on his walk-around: an attached chain. Nevertheless, ORM also is about doing the right thing. He did the right thing. It would have been so easy just to have trusted what we saw: all chocks and chains accounted for and green gauges.

Admittedly, when I recently asked him about that night, he said he really never realized how important his decisions were, nor did he realize it was ORM. That's OK, because I do, and I'm alive today to tell the story, and to teach ORM in a way we all can understand and relate to. Thanks again, Emile, for saving our lives that night. 

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